

## DPA III+ ISA -or- DPA III+ PC/104 Quick Start Guide

This guide explains basic DPA product installation. Refer to the manual on the installation CD for more details. The DPA package includes a *DG Installation CD-ROM* with the driver files necessary to use this product. You may need to install OEM software packages (diagnostic or otherwise).

### Package Contents

- DPA III *Plus* ISA -or- DPA III *Plus* PC/104 Hardware Adapter
- DG Installation CD-ROM with the following content:
  - DPA Native Drivers
  - DPA RP1210A Drivers
  - Sample RP1210A application
  - Other debugging applications
  - DPA User's Manual (as a PDF file)

## A. Configuring the DPA

The DPA unit needs the following PC hardware for operation:

- AT-compatible computer (or higher)
- Interrupt 5, 7, or 10 available
- I/O Address Range 200, 220, 300, or 320 available
- PC/104 hardware needs a free PC/104 Bus Slot
- ISA hardware needs a free ISA Bus Slot

### To configure the DPA:

The DPA III ISA and PC/104 card uses jumpers to set the resources (IRQ and Base Address) that it will use. The DPA supports four base address choices and three IRQ selections, as defined in the section above (Information is printed on the ISA card for simple configuration.)

### Selecting the Interrupt and I/O Address Range for your hardware:

Before installing the DPA PC/104 card, it is important to check your PC's current configuration to identify an unused IRQ and address region. In Windows 95 or Windows 98, you may identify these regions using the device manager. In Windows NT, you may check the current configuration using the WINMSD.EXE program.

## B. Installing the DPA Hardware

Once you have configured the resources and settings for your DPA, power down the PC. Locate an available ISA or PC/104 slot (hardware dependent), and insert the adapter. Once the adapter is installed in the PC, you must install the appropriate drivers, as described in the next section.

## C. Installing the DPA Program

The DPA package includes a *DG Installation CD-ROM* with the driver files necessary to use this product. You may need to install OEM software packages (diagnostic or otherwise).

### To install the DPA Program:

1. Insert the *DG Installation disk* into your CD-ROM drive. This will automatically launch the "Dearborn Protocol Adapter Installation" application. The **Dearborn Protocol Adapter Installation: – Main Menu** screen appears. **Note:** If the installation program does not automatically start running, use Windows Explorer to locate the file named **DPAInstall.EXE** on your CD-ROM drive. Double-click (i.e., open) this file to start the installation.
2. Select the software driver(s) you need.
  - a. **For OEM Truck Customers** – running truck/service bay/OEM diagnostic software, click **Install Dearborn Protocol Adapter RP1210a Drivers** (most users will choose this option). This displays the *RP1210a Drivers* dialog. Click **Install RP1210a Drivers for ISA or PC104 DPAs**. The *Dearborn Group DG1210* install screen appears. Click **Next**. In the *Backups Replaced* dialog, click **Next**. In the *DPA Settings* dialog select the *Base Address* and *IRQ* where the device is to be installed.

*Hardware Conflicts* dialog (may not appear if this is the first installation of ISA or PC/104 drivers on your machine):

- i. If you have previously installed Native or RP1210a Drivers for a DPA at these settings a warning will appear, select **Yes**.
- ii. If you have not installed drivers for the ISA or PC/104 card at these settings and a warning appears, you may have a hardware conflict. Select **No** and re-select **Install RP1210a Drivers for ISA or PC104 DPAs** with different Port and IRQ settings. You need to power-down your PC and change the jumper settings on the DPA hardware to match the new hardware settings that you have set via the driver installation.

In each of the following two *Replace Files* dialog, select **Yes** to install the files. Click **Finish**. You must restart your computer to complete the installation.

- b. **For Other Customers** – running Dearborn Group specific software such as DLM or writing a DPA specific application, click **Install Dearborn Protocol Adapter Native Drivers**. The *Dearborn Protocol Adapter 8x Drivers* install screen appears. Click **Next**. In the *Destination Location* dialog, click **Next**. In the *Select Components* dialog, make sure the ISA/PC104 Driver selection box is checked then click **Next**. In the *DPA Settings* dialog select the *Base Address* and *IRQ* where the device is to be installed.

*Hardware Conflicts* dialog (may not appear if this is the first installation of ISA or PC/104 drivers on your machine):

- i. If you have previously installed Native or RP1210a Drivers for a DPA at these settings a warning will appear, select **Yes**.
- ii. If you have not installed drivers for the ISA or PC/104 card at these settings and a warning appears, you may have a hardware conflict. Select **No** and re-select **Install RP1210a Drivers for ISA or PC104 DPAs** with different Port and IRQ settings. You need to power-down your PC and change the jumper settings on the DPA hardware to match the new hardware settings that you have set via the driver installation.

In each of the following two *Replace Files* dialog, select **Yes** to install the files. Click **Finish**. You must restart your computer to complete the installation.

## C. Install the DPA Program (cont'd.)

The DPA unit needs the following cable connections:

- From the DPA to the Truck (vehicle) - for the vehicle network connection and power. (**Note:** You must either purchase the optional cable or supply your own cable).

### Vehicle Communication:

If using an optional DG cable, connect one end to the DP15 (15-pin) connector of the DPA and the other end to the truck (or other vehicle) diagnostic Deutsch connector for vehicle network connection. Power can also be supplied through this connector from an external source: 9-32 VDC, 250 mA. (**Note:** Use only one power source - either the PC or external power source. Do not use two power sources simultaneously or product damage will occur.) Pinout information for the specific DPA version is available in Appendix D of the DPA Family Manual (included on the *DG Installation CD-ROM*).

## D. Troubleshooting

Common problems and solutions are included in this topic. Pinout information for the DPA version is available in Appendix D of the DPA Family Manual (included on the *DG Installation CD-ROM*).

### Cannot communicate with the DPA

Problem: Unable to communicate with the DPA Hardware Interface.

Solution: Make sure an unused IRQ and Base Address are being selected during the driver installation. Also check the jumpers on the DPA hardware to make sure the hardware settings match the settings that you selected during driver installation.

### Cannot communicate with the bus

Problem: No bus communications.

Solution: Verify cable connections are secure and correctly terminated.

## E. View / Print Documents

On the install CD-ROM, click **View a Document** to open the dialog. Select the desired "Dearborn Group Documents" to view. The selections include:

- DPA Quick Start Guides
- DPA II Plus, III, III Plus, 4, RF Manual
- DPA III /I Manual

Each document is in PDF format so the computer must have a copy of Adobe Acrobat Reader to view these documents.

**Note:** to get copies of this quickstart card, click **View a Document, DPA Quick Start Guides**. This displays the *Quick Start Guides* dialog. Select the desired guide to view. The selections include:

- Data Link Monitor (DLM) Application
- DPA RF
- DPA 4 USB
- DPA III Plus and DPA II Plus Serial
- DPA III ISA and PC-104
- DPA III /I

## F. Install Application

On the install CD-ROM, click **Install an Application** to display the *Install an Application* dialog. Select the desired application to install.

### To Run a Debugging Application:

1. On the install CD-ROM, click **Run a Debugging Application** to display the *Run a Debugging Application* dialog. Select the desired option:
  - a. **CheckDPA** – Click this button to verify that you can communicate with the DPA via the native drivers. Note: you must have a copy of the native drivers installed in your default path (system directory) for this application to run. The program asks for DPA type, IRQ and Port Address.
  - b. **GetDG121032 DLL Versions** – Click this button to display and log all 1210 driver versions on your computer.
  - c. **Get Native DLL versions** – Click this button to display and log all DPA native driver versions on your computer.

## G. DPA Accessories

The following optional accessories can be obtained for the DPA.

DG-J1939-04-CABLE: This special "Y" cable lets you directly connect your DPA (fitted with a "IT" endplate) to Deutsch 6- and 9-pin truck diagnostic connectors.

DG-OBDII-O-CABLE: A 6-foot cable with a standard automotive "OBDII" diagnostic connector at one end. The other end of the cable is open-ended to let you custom tailor this cable for your specific needs.

DG-DLM: A Windows-based software analyzer package that lets you record and playback vehicle data.

## H. Contacting Technical Support

You can contact Dearborn Group's technical support using any of the following methods.

Phone: (248) 488-2080  
Fax: (248) 488-2082  
email: techsupp@dgtech.com



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